What is claimed is:

1. A method for identifying compounds useful for modulating body weight, the method comprising:

contacting a test compound with a mammalian sequence #115;

determining whether the test compound binds to the mammalian sequence #115; and

identifying a compound that binds to the mammalian sequence #115 as a compound useful for modulating body weight.

2. A method for identifying compounds useful for modulating body weight, the method comprising:

contacting a sequence #115 ligand with a mammalian sequence #115 in the presence and absence of a test compound;

determining whether the test compound alters the binding of the sequence #115 ligand to the mammalian sequence #115; and

identifying a compound that alters the binding of the sequence #115 ligand to the mammalian sequence #115 as a compound useful for modulating body weight.

- 3. The method of claim 1, wherein the mammalian sequence #115 is expressed on the surface of a recombinant cell.
- 4. The method of claim 2, wherein the mammalian sequence #115 is expressed on the surface of a recombinant cell.
- 5. The method of claim 3, wherein the recombinant cell is an eukaryotic cell.
- 6. The method of claim 4, wherein the recombinant cell is an eukaryotic cell.

7. A method for identifying compounds useful for modulating body weight, the method comprising:

contacting a test compound with a cell expressing a mammalian sequence #115; determining whether the test compound alters activity of the mammalian sequence #115; and

identifying a compound that alters activity of the mammalian sequence #115 as a compound useful for modulating body weight.

- 8. The method of claim 7, wherein the activity of mammalian sequence #115 is determined by measuring the level of cAMP in the cell.
- 9. The method of claim 7, wherein the activity of the mammalian sequence #115 is determined by measuring the level of cytoplasmic Ca²⁺ in the cell.
- 10. The method of claim 8, wherein the cell further contains a reporter gene operatively associated with a cAMP responsive element, and the level of cAMP is measured by measuring expression of the reporter gene.
- 11. The method of claim 10, in which the reporter gene is alkaline phosphatase, chloramphenicol acetyltransferase, luciferase, glucuronide synthetase, growth hormone, or placental alkaline phosphatase.
- 12. The method of claim 7, wherein the activity of the mammalian sequence #115 is measured by measuring intracellular inosital 1,4,5-trisphophate (1P3).
- 13. The method of claim 7, wherein the activity of the mammalian sequence #115 is measured by measuring intracellular 1,2-diacylglycerol (DAG).
- 14. The method of claim 1, wherein the mammal is a mouse.

- 15. The method of claim 2, wherein the mammal is a mouse.
- 16. The method of claim 7, wherein the mammal is a mouse.
- 17. A pharmaceutical formulation for the modulation of body weight, comprising a compound that modulates the activity of a mammalian sequence #115, mixed with a pharmaceutically acceptable carrier.
- 18. A package comprising the pharmaceutical formulation of claim 17 and instructions for administering the pharmaceutical formulation for the purpose of modulating body weight.
- 19. A method for preparing a pharmaceutical composition useful for modulating body weight, the method comprising:

contacting a test compound with a mammalian sequence #115;
determining whether the test compound binds to the mammalian sequence #115;
and

combining the test compound that binds to the mammalian sequence #115 with a pharmaceutically acceptable carrier to create a pharmaceutical composition useful for modulating body weight.

- 20. A method for the treatment of obesity comprising administering, to a patient in need thereof, the pharmaceucitcal composition according to claim 19.
- 21. A method for the treatment of cachexia comprising administering, to a patient in need thereof, the pharmaceucitcal composition according to claim 19.
- 22. A method for preparing a pharmaceutical composition useful for modulating body weight, the method comprising:

contacting a sequence #115 ligand with a mammalian sequence #115 in the presence and absence of a test compound;

determining whether the test compound alters the binding of the sequence #115 ligand to the mammalian sequence #115; and

combining the test compound that alters the binding of the sequence #115 ligand to the mammalian sequence #115 with a pharmaceutically acceptable carrier to create a pharmaceutical composition useful for modulating body weight.

- 23. A method for the treatment of obesity comprising administering, to a patient in need thereof, the pharmaceucitcal composition according to claim 22.
- 24. A method for the treatment of cachexia comprising administering, to a patient in need thereof, the pharmaceucitcal composition according to claim 22.
- 25. The method of claim 1, wherein the mammalian sequence #115 is murine sequence #115.
- 26. The method of claim 2, wherein the mammalian sequence #115 is murine sequence #115.
- 27. The method of claim 7, wherein the mammalian sequence #115 is murine sequence #115.
- 28. The method of claim 19, wherein the mammalian sequence #115 is murine sequence #115.
- 29. The method of claim 22, wherein the mammalian sequence #115 is murine sequence #115.

- 30. The method of claim 1, wherein the mammalian sequence #115 is human sequence #115.
- 31. The method of claim 2, wherein the mammalian sequence #115 is human sequence #115.
- 32. The method of claim 7, wherein the mammalian sequence #115 is human sequence #115.
- 33. The method of claim 19, wherein the mammalian sequence #115 is human sequence #115.
- 34. The method of claim 22, wherein the mammalian sequence #115 is human sequence #115.
- 35. An antibody that recognizes an isolated polypeptide comprising the amino acid sequence of SEQ ID NO:6.
- 36. An antibody that recognizes an isolated polypeptide which is encoded by a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:5.